Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 10 as follows:

Since the segment B is shorter than segment A, the volume expansion in segment B is more than the volume expansion in segment A. Since the same volume has been added to segments A and B, the cross-sectional radius (R_a) of segment A will be ~~larger~~ smaller than the corresponding radius (R_b) for segment B. The pressure inside each of these elastic containers varies with the inverse of the cross-sectional radius of the curvature of the elastic tubes, by virtue of the Laplace-Young law of elasticity,

$$P = 2\sigma/R$$

here P is the pressure, s is the surface stress and R is the cross-sectional radius of curvature.

Please amend the paragraph beginning at page 5, line 1 as follows:

Therefore, liquid inside segment ~~B~~ A will actually experience more pressure from the contracting force of the elastic tube wall. While this effect is counterintuitive, it is

often experienced when blowing up a balloon. The beginning portions of blowing up the balloon are much more difficult than the ending portions. The same effect occurs in the asymmetric tube. The pressure in segment ~~B~~ A will actually be larger than the pressure in segment ~~A~~ B.

Please amend the paragraph beginning at page 5, line 9 as follows:

If the constriction of segment P is removed rapidly, before the pressures in segment A and B equalize with the total system pressure, then the liquid in the high pressure section ~~B~~ A will flow toward the low pressure segment ~~A~~ B. Hence, liquid flows from segment ~~B~~ A towards segment ~~A~~ B in order to equalize pressure. This creates a pumping effect shown by the arrow y in Figure 1.